

METHOD AND HARDWARE ARCHITECTURE FOR AUTOMATIC MICROARRAY IMAGE ADDRESSING

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Abstract: NOVELTY - The invention relates to a method and hardware architecture for automatic microarray image addressing. The claimed method consists in determining a horizontal profile and a vertical profile of the image, applying a shock filter model and determining some points of inflection and tracing some pairs of horizontal and vertical lines allowing the selection and location of spots, eliminating the necessity of a workstation and a specialized software platform. The claimed hardware architecture consists in storing the horizontal and vertical profiles of the microarray image in a block RAM memory (8) using two information displacement registers (10 and 11) and a parallel processing block with two output registers (14 and 15) and dividing the profile data structure into blocks of size n, the same as the size of displacement registers (10 and 11), for uploading the data in the memory (8) into the displacement registers (10 and 11), passing and processing thereof by output registers (14 and 15) and storing the results in a RAM memory (9).

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